The John Snow Project

PRIMER

ARE YOU SERIOUS? COVID-19 HASN'T GONE AWAY?

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Talk to most people about COVID-19 risks and a common response is, "If it was that bad, governments would do something about it."

We've written previously about the analogies to smoking and the historic role governments played in normalizing harm even after the risks were well proven[1].

While COVID-19 has been causing disruption at the Olympics[2-4] and regions around the world report sustained high rates of transmission[5-7], just this week three studies have been published demonstrating COVID-19's role in increasing the risk of deafness[8] and harming the vascular system following acute infection[9], and causing immune dysregulation and cardiovascular damage in people with Long Covid[10]. These join the many thousands of studies evidencing the short and long-term harm of SARS-CoV-2 infection.

Some people will decry the sheer volume of such studies saying it is improbable a single pathogen can cause such diverse damage. SARS-CoV-2 doesn't care about probability or people's expectations. It is a virus that infects cells using one of the most common receptors, a receptor that is expressed almost everywhere in our bodies. It can infect many types of immune cells and has been demonstrated to persist for years in the gut and spinal fluid of some people[11]. SARS-CoV-2 has also been shown to cause chronic activation of the immune system and play a role in driving new onset allergies, allergic diseases and autoimmunity[12,13].

People in the Covid cautious community often wonder when governments will finally take this pervasive virus seriously. For the uninformed, COVID-19 is akin to a cold, and some particularly ill-informed people believe the virus has gone away entirely. There are still some people who are shocked to experience reinfection.

With Long Covid remaining a significant risk[14,15], and promises of protective immunity, hybrid immunity and super hybrid immunity receding into the rearview mirror of ignorant and unfounded optimism, it seems people must simply accept the roulette of repeat infection. But should they? For some COVID-19 will pass with symptoms similar to a cold, for others it will be fatal. For a significant proportion it will be debilitating. And we still haven't seen the long-tail risk. It is entirely reasonable to expect that like Epstein Barr Virus, Cytomegalovirus and HPV, SARS-CoV-2 will cause damage years or decades after infection[16].

There is another way. Instead of blithe nihilism and the abandonment of principles of public health that have advanced human society for centuries, governments could instruct their public health and regulatory agencies to insist on cleaner air policies, mandating air quality that protects human health, in the same way we mandate water quality. Malaria prevention is not perfect, but that doesn't stop us using every possible tool at our disposal to minimize the impact of the disease around the world.

Many engineers have decried the idea of needing a random trial to prove physics, but a Norwegian team did one anyway, examining whether surgical masks help prevent infection by respiratory viruses.They found surgical masks were 30% effective at reducing symptoms of respiratory infection[17]. This is no surprise. It's long been established that surgical masks have a minor impact on airborne infection control, but they aren't worn by anyone who is serious about avoiding SARS-CoV-2 or any other respiratory pathogen. A 2008 UK Health and Safety Executive evaluation demonstrated that surgical masks provide a 6-fold reduction against aerosolized virus, while respirator masks provide at least a 100-fold reduction[18].

Perhaps one of the biggest calamities of the COVID-19 pandemic was robbing people of one of the most effective forms of protection: respirator masks. Many people believe masks don't work, or if they do that they primarily protect others from infection and don't protect the wearer. This belief is completely unfounded and wholly wrong. Respirators have long been used to protect people working with some of the most dangerous pathogens imaginable, and FFP3/N99 respirators have been shown to offer up to 100% protection against SARS-CoV-2 in healthcare settings[19]. Imagine how many lives might have been saved and how many cases of Long Covid could have been avoided globally if people had been told that a well fitted mask of the correct grade (N95/FFP2 or higher) can offer complete protection against infection. We don't need a magic bullet to solve the problem of COVID-19. We need to end the denialism that afflicts us and confront reality. We need to stop living in a comforting delusion and use the tools we already know work to minimize the impact of the disease. Masks, ventilation, filtration, vaccination, isolation, and therapeutics. As this study of hospital

~~filtration, vaccination, isolation, and therapeutics. As this study of hospital~~ admission protocols clearly demonstrates[20], we have the tools we need to protect human health. We need to start using them.

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